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ORIGINAL DEPARTMENT.

Lectures.

INTRODUCTORY LECTURE TO COURSE ON HYGIENE.

Aux. Faculty of Medicine, University of Pennsylvania, April 3d, 1866.

By HENRY HARTSHORNE, M. D.

Without any intent to arrogate more than belongs to the department of Hygiene, it appears to me not too much to say, that it is hardly second in *intrinsic* importance to any of those taught in the University. If prevention is always better than cure;—if the enjoyment and strength of life depend not only on rescue from dangerous diseases, but also on the possession of vigorous health;—and if a large part of sound practical therapeutics consists in measures rather hygienic than medicinal, as I believe,—then I think my proposition is sustained. Should more be wanting to enforce it, it may be found in the relation of sanitary science, public hygiene, to the vitality and mortality of communities. Sanitary science is essentially State medicine. There is no other therapeutics for masses of men. And when we compare results, involving large numbers of human beings, does not preventive medicine exhibit triumphs greater than those of curative practice? I have no wish whatever to depreciate these; I rejoice in them all. But look at the facts.

In Constantinople, in the year 543, of our era, 10,000 people, for a time, died daily of plague. In eight years from 1345, plague destroyed in all, in various places, about half of the then existing population of the globe. In 1665, 68,000 died from the same disease, in the city of London alone.

Now, from hygienic measures, there is no reason to doubt, from the application of sanitary principles, it has come that plague has been banished from Europe, and almost extinguished in the East.

Severe epidemics of cholera have a mortality of 50, or more, per cent. The power of medicine to

reduce this, has as yet been small. But it is considered that the city of Baltimore was saved from the visitation of this scourge, in 1849 and 1854, by timely precautions taken by its authorities, favored by local facilities for them in its site.

Yellow fever has, at some times, and in certain places, been almost as destructive. No antidote, no specific remedial treatment has as yet been found for it. But General BUTLER demonstrated the possibility of its total *prevention*, in the midst of war and previous confusion, during the late military occupation of New Orleans. A great mortality, among persons altogether unacclimated, must have been thus averted.

It is almost a proverbial saying in England, that "the annual slaughter in England and Wales, from preventible causes of *typhus fever alone*, is double the amount of what was suffered by the allied armies at the battle of Waterloo." In the time of SYDENHAM, plague, small-pox, dysentery, and scurvy, caused most of the mortality in London; diseases, two of which are capable of prevention, and the others of great mitigation by sanitary measures.

In France, BAUDELOQUE describes a striking example in regard to scrofula. The village of Oresmeaux, though one hundred feet above the plain, was, sixty years and more since, built of clay, without windows to the houses; all being very damp. Scrofula affected nearly all the families, and extinguished several. A fire then destroyed nearly a third of the village. That part was rebuilt in a better manner, and by degrees scrofula disappeared from it; remaining in the rest. Twenty years after, another fire consumed another third; this, too, was rebuilt with improvements, and the same gain in health was observed. After that, while scrofula continued destructively in the old portion of the village, the new parts continued to be entirely free from it.

The remarkable cures of goitre and disgusting cretinism obtained in Switzerland (by Dr. GUGGENBUHL) through the simple removal of those affected to high and salubrious localities, illustrate the same point.

So does the account cited by Dr. COMBE of the Island of St. Kilda. In 1838, of every ten chil-

dren of its inhabitants, eight died between the eighth and twelfth days of their existence. Yet a clergyman resident there had at the same time a family of four children, in good health. What made the difference? His house was constructed and managed as a house ought to be; while the huts of the natives were small, low-roofed, without windows, and used in winter as receptacles of manure, laid out upon the floors and trodden under foot to a depth of several feet. But I need not multiply these examples, in which all sanitary records abound. I wish to add only one, which has great significance. Mr. CHADWICK asserts that, in a well-marked instance, involving a number of families, *intemperance*, hopeless to all appearance, in a low, insalubrious quarter of London, became curable—yielded to reform under effort—when the subjects of it were transferred to an open, healthful, and comfortable locality. Our bodies and our spirits are held fast in close companionship. To raise the one is to help the other. Past all doubt, sanitary improvement promotes domestic, social, and moral reform. The Board of Health is a good handmaid or helpmeet for the Board of Missions. Bread in the one hand and the Bible in the other, will do more for the feeble, suffering, and degraded poor, than two Bibles and no bread.

Let us glance now, for a few moments, at the history of our subject. Hygiene as an art, is older than therapeutics; as the avoidance of disease must have been, from instinct as well as intelligence, an object sought before the discovery of means for its medicinal relief. First hygiene, then surgery, then medicine; was the natural and historical order. The early temples of *ÆSCULAPIUS*, before *HIPPOCRATES*, were *sanitaria*, rather than schools of medical art; to that time a body of medical science could hardly be said to have begun to exist; and the first surgery, at all systematic, is referred to the need of the masters of the gymnasia and palaestra, to deal often with accidents occurring among the contestants in their exercises.

But, further back than this, some recognition of hygienic principles may be traced in the cradle of the most potent civilization of antiquity—in Egypt. In the great pyramid of *CHERES* is an arrangement evidently intended for the ventilation of its dark interior chambers. The embalming of bodies of the dead, not only of men but of animals, however it may have been associated with superstitious beliefs, is so well adapted to the prevention of insalubrity in a populous land with a tropical climate, as to make it likely that

it sprang in great part from the preventive wisdom of the priests.

Neither is it irreverent, nor a disparagement of the divine authenticity of the Mosaic law, in whose ritualism so much reminds us of Egypt in the days of its monuments, to suppose that some things were retained in the Levitical code, of what was known and practised in the land of bondage before the Exodus. No doubt, however, *MOSES* greatly extended the provisions required for health among his people. His regulations concerning food, ablutions, and other purifications, and segregation of persons with certain diseases, were imperative and precise. I will not detain you with examples from so familiar and accessible a document.

In ancient Greece, as I have intimated, physical culture was most highly esteemed. *SOCRATES* was in person a match for more than one, not only in philosophic disputation, but as a soldier on the field. *PLATO* was a superior athlete, as well as the most divine of sages; and *ALCIBIADES* and *PERICLES* were as swift of foot and strong of arm as they were eloquent of tongue and keen in state-craft, or bold in war. It is on good authority that I state the opinion, that the amazing intellectual supremacy of the men of Athens and other parts of Greece, from *HOMER* to its decadence, was, in no small part, owing to the abundant care always maintained of the development of the whole organization, brain and body together—"mens sana in corpore sano." In Sparta, a barbaric ruthlessness induced the custom of exposing infants to the rude elements, so as to allow only those whose bodies had vigor enough to be thus hardened to live; the feeble ones being destroyed by it. In most of the cities of ancient Greece, public baths existed, for both the rich and the poor. Gratuitous attendance, too, of the poor, for prevention as well as cure of disease, by *arch-iaters* appointed publicly for the purpose, prevailed. *DEMOCEDES* was one of the earliest of these. This custom was afterward imitated in Rome; and later, in Germany—where the *Meister-Arzt* of the 15th century, and the *Stadt-Arzt* and *Kreis-physicus* of later dates, had a similar place.

The goddess of health, *HYGEIA*, of the Greeks, was the daughter of *ÆSCULAPIUS*, god of medicine. Her name was mentioned, with the other deities, in the Hippocratic oath; which every loyal physician was required to take, as one of the *Æsclepiadæ*: "By *APOLLO*, the physician, by *ÆSCULAPIUS*, by *HYGEIA*, *PANACEA*, and all the gods and goddesses."

Of early writers upon hygiene in Greece, we

have HIPPOCRATES himself, the first, in his work on "Air, Waters, and Places;" a treatise in which the influence of climate and locality, not only upon health, but upon the characters of races of men, was pointed out as clearly and sagaciously as it has been since by MONTESQUIEU, in his "Esprit des Lois," written in 1748; and, with less originality, in our own times, by MICHALET, GUYOT, and BUCKLE. PHILISTON, DIOCLES, and PLUTARCH also wrote early hygienic treatises.

Positive measures of public hygiene were instituted, perhaps, first by ACRON, of Crotona, of the school of PYTHAGORAS; who is said to have dissipated the cause of a plague at Athens, by fires burned in the streets. EMPEDOCLES afterward found it possible to destroy or impede the action of malaria, in one instance by draining a swamp, and in another by building a high wall to protect an exposed town. HERODICUS was so famous for his application of gymnastics and regimen to the improvement of health, that PLATO accused him of doing an ill service to the State—by keeping alive people who ought to die, because, being valetudinarians and below par, they cost more than they were worth to the community.

Rome showed her appreciation of sanitary art, by extensive drainage of the base of the hills on which the city was built; by the magnificent sewer, Cloaca Maxima, of which a part is yet left, the oldest ruin of Europe, thirteen feet in diameter at the outlet; by the aqueducts, and by suburban interments, whose number is attested all along the Appian Way; and by the appointment of Ediles, officers whose duty was to inspect and regulate the construction, with a view to salubrity and safety, of all private and public buildings. Regulations of internal sanitary police, in regard to impurities of all kinds, were also highly advanced among the ancient Romans. Besides these, the private and public baths of Rome, some of them palatial in grandeur, were in part hygienic, although degenerating into effeminate luxuriousness; as the gymnasia did, at last, into the scenes of bloody gladiatorial fights of men and beasts.

Latin writers upon hygiene were especially CELSUS, GALEN, in an express work upon the care of health, ORIBASIIUS, AETIUS, and PAULUS AEGINETA.

Pass we from these, for want of intermediate material, over the quaint Latin poem of JOHN of Milan, in the beginning of the 12th century, to Quarantine. The purpose of this institution was the exclusion of the Egyptian plague from Italy.

The name was derived from *quaranta*, forty, the term of days prescribed for the detention of suspected vessels on arrival at or near port, the time probably following one of the Mosaic periods of purification. I will give you here only a few dates, for I fear being tedious upon this historical theme, while able to make it but an outline.

Florence had the first beginning of quarantine, about 1348. Then Venice and Sardinia, and the other countries, afterward, of Europe. The earliest *lazaretto* dated about 1453. Regular quarantine was established in England in 1710. In 1700, WILLIAM PENN, the founder of our State and city, had enacted a quarantine law in Philadelphia.

Although the utility of quarantine for any purpose is now warmly disputed by some, and its range of availability and proper mode of management obviously need very different limitations, at all events, from those of the middle ages, its existence has been a cardinal fact in the history of sanitary science. It is to be hoped that our own day will witness the final settlement of all questions concerning it; and the bringing into harmony the now conflicting opinions of medical men, and, with the real facts, a reconciliation of the interests of commerce and the popular understanding of communities.

Including rightfully under hygiene all measures of "preventive medicine,"—we may rank the introduction of vaccination, by Dr. EDWARD JENNER, in 1798, as its most signal triumph. Nothing in all the records of our profession, not even the discovery of the power of cinchona in the cure of malarial disease, excels this in value to mankind.

A few words now upon the literature of modern hygiene.

BERHAAVE and CULLEN incidentally taught hygiene. LOCKE, the philosopher, wrote on physical education; but it is to France, in our own century, that we must ascribe the credit of the establishment of a definite science of "*hygiène*." The word itself is French. I shall not enumerate many names; but those of TOURTELLE, HALLÉ, DU CHATELET, TARDIEU, VILLERMÉ, FODÉRÉ, CABBANIS, BOUDIN, LEVY, and BECQUEREL, must not be passed by here.

Personal hygiene was many years ago written upon in England, by Dr. A. COMBE and others; climatology, by JOHNSON, MARTIN, and JOHNSTON; public hygiene has had its later lights there, in CHADWICK, SOUTHWOOD SMITH, SIMON, LETHEBY, GREENHOW, and FLORENCE NIGHTINGALE, the angel-hearted and nobly strong-minded

English woman. On the continent of Europe, outside of France, there have been—most noted as hygeists—QUETELET, FRIEDLANDER, MÜHREY, CASPER, HUFELAND, and others. Sanitary topics have now become—in Great Britain—favorite ones with all highly educated men. Their Social Science Association, and Epidemiological Society, have accomplished a great deal of good work.

In our own country, this department of science has not been altogether neglected. After Dr. RUSH, one of the earliest and best writers upon it here, has been our distinguished fellow-citizen, Dr. JOHN BELL. Another was the able and learned Professor DUNGLISON. An excellent treatise, especially upon military hygiene, was written during our late war, by Surgeon-General HAMMOND; and one on mental hygiene, by the eminent Dr. RAY, not long after. Besides, we have Drs. JARVIS and CURTIS, of Boston; SNOW, of Providence; E. HARRIS and GRISCOM, of New York; BARTON, of New Orleans, and, far from the least, my distinguished friend, Dr. JEWELL, of Philadelphia, the founder of the first American Sanitary Convention, and well known for many valuable sanitary labors.

Our science is, now, the rising science of the day. To it, in Europe, several well conducted periodicals—the *Annales D'Hygiène*, the oldest and best—are chiefly devoted. At Paris, public professorships of hygiene have been in existence for many years. In Great Britain, there are now two at least;—that of Prof. PARKES, in the Army Medical School at Netley, England,—and of Prof. MAPOTHER, in the Irish Royal College of Surgeons, at Dublin. In the United States, while the subject has received some partial attention during courses upon other branches,—I am not aware of any definite public course of instruction expressly upon it—of any regular collegiate professorships of hygiene, until it was made a part of the plan of enlargement of the curriculum of this University, by the late munificent endowment of Professor Wood; the advantages of which we are now proceeding to enter upon.

I feel, then, gentlemen, that the responsibility I bear here is a somewhat heavy one. But, the same reason,—that this course is the first of its kind here,—gives good ground of claim for indulgence,—for asking lenient allowance for any deficiencies,—because there are no precedents to guide,—there is no routine to follow. I must depend upon your kind consideration in this.

But I have confidence in the interest of my subject; as well as in its importance. As to the latter, let me add a few words.

In France, in 1772, the annual proportion of deaths was 1 in 25; in 1845-6, 1 in 45. The mean duration of human life in the same country was in 1806, 28½ years: at present, 33.6 years. In London, in 1685,—not a sickly year—one in twenty of the inhabitants died; now it is but about one in forty. MACAULAY estimated in his History, that the difference between London in the 17th and London in the 19th centuries, is as great as between the same city in ordinary years, and in those in which the cholera prevailed. Life has been prolonged twenty-five per cent. in the course of the last fifty years. In the 16th century, at Geneva, the mean probability of life was 8 or 9 years; in the 17th, 13 to 14; the 18th, about 30; and in the 19th, 40 to 45. Now to what is this great change owing? No doubt, advances in therapeutical, surgical, and obstetrical science and art have done much; but I am bold to believe that increased knowledge and observance of the laws of health have done more.

Much, however, remains yet to be done in the same field. Millions of men's lives are wasted annually by neglect, error, or ignorance. Less than a score of years ago, the mean duration of life in New York and Philadelphia was but between 20 and 21 years. Plague has become almost extinct; but yellow fever is dreaded, year after year, even in our own latitude; and, looking eastward across the sea, we now behold cholera, like a portentous cloud, looming in the distance, full of death and terror. These, too, have to be met and averted. Will it not be a triumph of hygiene, if it can be shown that all great pestilential epidemics are preventable? That no yellow fever need ever visit our ports,—no cholera ever cause panic in our cities? I believe this to be the truth,—and a truth than which hardly any other, of private or public interest, can have more importance.

I know that some very eminent sanitarians insist at present, especially in England, that too much has been made of *filth*, (which Lord PALMERSTON called "only matter *out of place*,") as a cause of disease. I know that contagion, positive, contingent or constructive, is dreaded by many still, almost as it was in the days of the first quarantine of the 14th century. Contagion is asserted of cholera, by some, even, of high medical authority. And so, too, of yellow fever.

It will be a part of my duty, during the progress of these lectures, briefly, but carefully to examine these questions; as bearing upon prophylactic measures, for individuals and communities. I hope to be able to show you that most,

if not all of the facts can be explained in harmony with the best humanitarian interests; and, hopefully for the cause of progress, commerce and social intercourse among mankind.

We shall never be able to drive disease from the earth. Not only the poor, but the sick, "will we have always with us." Man's life will never again be prolonged beyond a century. Enough, if he could be made to secure, as a mean, his three-score years and ten. Enough, if from those years were taken, by right self-management, of the "ills that flesh is heir to,"—all but those which a wise Providence would allot to us, without their being multiplied by our own ignorance or fault.

Communications.

OSSIFICATION OF THE MITRAL VALVES, Complicated with Subacute Pleurisy of the Right Side.

By JOHN C. THOMPSON, M. D.,

Of Washington, Middlesex co., New Jersey.

During the latter part of last April, I was first called to see the Rev. Mr. GOBLE, aged 66, of rather spare build, but a man who had enjoyed for years back very fair health. I found him suffering from an extremely severe attack of dyspnoea. I examined the left side of the chest, with as much accuracy as the symptoms would permit.

The examination, though unsatisfactory, pointed very clearly to some organic disease of the heart, the nature of which I left to be determined by a subsequent and more detailed examination. On questioning the patient I learned that he had been unwell for nearly two months, during which time he had been unsatisfactorily treated by some infinitesimal disciple of HAHNEMANN. Concerning the nature of the disease, as well as the treatment, the patient was profoundly ignorant, having evidently never been informed of either. His prominent symptoms had been pain and distress in the right side. His great trouble when I was called was *dyspnoea*, and as at that time he neither complained of pain nor uneasiness in the right side, I did not deem it worth while to go beyond the region of the heart for the apparent cause of his illness. At this time I simply endeavored to relieve him from the dyspnoea, which partially yielded to the ordinary remedies, such as camphor, hyoscyamus, etc.

A subsequent visit revealed the fact that his feet and legs were oedematous. This oedema was soon followed by general anasarca and ascites.

As the effusion progressed, the dyspnoea became most obstinate. It hardly seemed possible that the patient could much longer endure the repeated suffocating attacks. For nearly two weeks he was almost entirely deprived of sleep, being unable to gain rest in any position. The administration of diuretics and hydragogue cathartics not only failed to diminish the effusion, but seemed powerless to arrest its rapid increase, so that by the middle of June the abdomen and lower extremities were enormously distended. About this time Dr. BALDWIN, of New Brunswick, was called in consultation. After a careful examination, he pronounced the disease regurgitation by the mitral valve, and seemed to regard the case as well nigh hopeless. He advised persistence in the effort to get rid of the effusion, by means of mild diuretics and cathartics. The dyspnoea still continued with unabated force, threatening the patient with death at each paroxysm, and rapidly exhausting him by preventing sleep. I then determined to make an attempt to procure rest at all hazards, and gave morphia, in grain doses, until sleep was obtained. He then slept for the first time in several weeks quite comfortably, for nearly twenty-four hours, and on waking seemed remarkably refreshed.

The morphia was continued at intervals for about a week, when nature materially relieved the patient; the skin of the left leg gave way to the pressure of the effusion. Having found an outlet, the effusion now slowly diminished; and as it diminished the kidneys became active, responding to the influence of milder diuretics, aiding in the good work until the effusion entirely disappeared. During this time the inevitable dyspnoea still continued, but less rebellious than before, so that by antispasmodics given *pro re nata*, the patient was rendered much easier. During all this time the general treatment was tonic. Just as the effusion disappeared erysipelas set in, showing itself where the effusion had forced its way through. This rapidly exhausted the patient, until finally he sank into a delirious condition. And now for the first time the dyspnoea entirely left him. Under tonics and stimulants he rallied, but as he slowly recovered the dyspnoea again made its appearance, gaining vigor with the strength of the patient. By the customary treatment it could readily be controlled, and under the influence of tonics and generous diet the patient slowly convalesced, and was able during the greater part of the winter to be about the house. He now slept quite comfortably during the night, being only occasionally disturbed by an attack of dyspnoea. At

this time I saw him only twice a week, pursuing a general tonic treatment, and gratifying the increasing appetite with most nourishing food. During the month of January he felt well enough to venture on a visit to his son, so that I did not see him for some five weeks. A few days after his return I was called to see him, and found him complaining of distressing colic. This was readily relieved by slight opiate treatment, but returned again and again for some six weeks; during this time the appetite slowly failed, and the patient gradually sank away, until on the 7th of April he died from sheer exhaustion, not only free from dyspnoea, but breathing with remarkable ease, and preserving his intellect to the last.

Autopsy 48 hours after death. Drs. STOUT, of South Amboy, and VAN GIESON, of English-town, were present, and assisted in the dissection.

On opening the chest we found the right lung adherent to the thoracic wall. Nearly the whole of the lower lobe was atrophied and hardened, but not hepatized. It was attached to the walls of the chest by numerous strong bands of fibrine. The spaces between these bands were filled by a semi-gelatinous effusion, while the cavity of the chest was about one-third filled with sero-purulent effusion.

The remaining part of the lung was healthy.

On bringing the heart to view, it was found to be moderately hypertrophied. The pericardium was quite firmly adherent, being with difficulty detached with the fingers.

The right ventricle and auricle were not dilated. The valves of the right side were healthy.

The left ventricle was considerably dilated.

The aortic valves were enormously thickened, and their free edges hard and unyielding. A stream of water directed parallel to the aortic current, regurgitated freely into the dilated ventricle, showing imperfect closure during life.

The mitral valves were also greatly thickened, and their free edges were rendered nearly as hard as bone, by calcific deposit. This bony deposit extended to about two-thirds of the circumference of the mitral orifice, and then leaving the valve, sent off a bony process on the muscular tissue. On looking at the auricular surface, the peculiar crescent-shape of the opening was quite apparent. Examining the ventricular aspect, the tendinous cords were found nearly healthy, being apparently not shortened; so that a stream of water applied in the direction of the ventricular current, permits but a very slight portion to regurgitate into the auricle. A few patches of atheroma were found on the aorta.

Abdominal organs healthy.

Remarks. Some thirty years ago, the reverend gentleman, who was the subject of this interesting lesion, suffered from an attack of acute articular rheumatism, for which he was bled, and soon recovered. It is not improbable that at this time the heart was involved, and the foundation of his future troubles laid. Nevertheless, he has enjoyed, until within a year or two, a very fair share of health; doing the hard work of a country clergyman, with no complaint of indisposition or fatigue.

For years at least, this bony deposit has been forming, the heart meanwhile gradually accommodating itself to the foreign body, so that but trifling inconvenience resulted. It might be conjectured that the aortic trouble was of more recent date than the mitral disease, for such an amount of aortic patency would soon produce serious symptoms; we therefore surmise that it was insidiously superadded during the latter years of the patient's life. On very closely examining the heart, and imitating by a stream of water as nearly as possible the current of blood controlled by the mitral valve, and noticing the very small amount that escapes into the auricle, we cannot well avoid the conclusion that *this extensive disease of the mitral valves interfered but little with the function of the heart, and of itself would not have produced death.* The valve was bony to be sure, but notice that it still performed its office, as its ventricular aspect was nearly healthy, so that the closure was quite complete, and regurgitation could have been but slight. The narrowing of the mitral orifice produced dilation of the auricle, by interfering with the free passage of the blood from the left auricle to the ventricle. The murmur therefore heard occasionally with the first sound of the heart during life must evidently be attributed, not to mitral regurgitation, but to the roughened leathery valves of the aorta. This was never marked enough at any time to enable me to form anything like a positive diagnosis.

It is not a little remarkable that extensive disease of the right lung should have remained undiscovered until after death; of some four excellent practitioners who saw the case at different times, not one examined the right side. A few taps of the finger would have revealed all this trouble, but yet not one of us thought of looking for it, as there was surely disease enough on the left side amply to account for all the symptoms observed. More remarkable is the fact that the patient never complained in the slightest degree of this right side. He neither had pain, nor did he cough, neither was there any

very striking alteration of the walls of the chest. We can readily enough imagine that this extensive pleuritic disease must have greatly aggravated and prolonged the distressing dyspnoea, which so persistently clung to the patient. We cannot but think, if the pleurisy had been early recognized, and properly treated, that our patient's life would have been somewhat lengthened, though sooner or later he must have been carried away with valvular disease. Such a complication of diseases it may not be our fortune again to meet with during a professional life-time, but be this as it may, one thing at least this post mortem has taught us, and that is, in all future cases of cardiac disease, to make a *thorough exploration of the whole chest.*

EXCISION OF EIGHT AND A HALF INCHES OF TIBIA, WITH GOOD RECOVERY AND A USEFUL LIMB.

By W. P. MOON, M. D.,

Of Philadelphia.

Believing that every case which gives us encouragement in the saving of valuable lives and also *useful limbs*, in the comparatively new field of surgery, excision, should be reported, I send you the following.

The vast amount of new bone that will form, under favorable circumstances, is truly astonishing, and it may well be a serious and difficult question at times for the surgeon to determine in some cases, both in civil and military practice, whether to excise or amputate.

Since I have seen what wonderful reparative power there is in nature, in this particular, I must confess I have performed one or two amputations which, with my present convictions, I should prefer to try excision for, should similar cases come under my care.

The question of mortality, however, will bear me out in this remark, I think that the chances of saving life are greater in amputation than in excision of some of the long bones. For example, the excision of both bones of the forearm has proved to be more fatal than amputation of the forearm. The same remark may be made in respect to excision of portions of the shaft of the humerus, the mortality being 3 per cent. greater than in amputation of the arm, as shown by the statistics of the late war. Respecting excisions of the shaft of the femur, we find the following decided judgment pronounced in Cir. No. 6, 1866, Surgeon-General U. S. A. "The specimens of the Museum and the records afford emphatic arguments against formal excision of the shaft of

the femur. With one exception, the few cases that recovered were those in which, after removal of detached fragments, the least amount of operative interference had been practised. The mortality-rate after excisions of the tibia and fibula is less than after amputations, as the statistics stand; but the number of cases in which the result is still pending is unusually large." Excision of the elbow-joint has proved more unsuccessful than almost any other form of excision, and in the cases where success has attended the operation, which I have seen, the forearm has been of very little service, while amputation at the elbow has been proved to give the very best results, contrary to preconceived opinions.

Excisions of the tibia or fibula have given encouraging results, and by this means useful limbs have been retained, but the most gratifying benefits we have obtained are shown in excision of the shoulder-joint over that of amputation. As reported by the Surgeon-General, Cir. No. 6, page 46, there were 458 amputations and 575 excisions of the shoulder-joint, with a mortality, so far as heard from, of 6.7 per cent. greater in amputation than in excision. The remark is made, and is no doubt a satisfaction to the medical staff of the army, "It is creditable to the surgery of the war, that the number of cases of amputation at the shoulder-joint reported is less than the number of cases of excisions of the head of the humerus, and that the latter operation appears to have been adopted in nearly all cases in which it was admissible."

J. S., private Co. D, 179th N. Y. Vols., 39 years of age, was admitted to Mower U. S. A. Hospital, Chestnut Hill, Philadelphia, July 22d, 1864, for gun-shot wound of right leg, received at the battle of Petersburg, Va., June 17, 1864.

A minnie-ball entered upper third of outside of right leg, passing downward obliquely through the spine of the tibia, at middle third, carrying away a small portion of the bone and emerging at inner side of the leg. The injury to the bone, though *apparently* slight, proved to be one of those contusions which destroy the vitality of the tissues to a considerable extent, and eventuate in a large amount of necrosis.

Simple dressings with water, followed by light simple cerate applications, were used for a few days, and for a time the wound seemed inclined to heal kindly, but sloughing of the soft parts, first in the track of the wound, and then of the bones, supervened. So far as the muscular tissues were concerned, the sloughing was arrested by the use of a gr. x. solution permanganate po-

tassa in water, but the slough of bone continued to extend until two-thirds of the tibia became involved in its entire circumference. Abscesses formed constantly, which were required to be opened.

During the progress of this exhausting injury a free stimulant and tonic treatment was kept up with nourishing diet, and the patient's health was comparatively good. At one time there was every prospect of an amputation being required, but active inflammation subsiding, and the condition of bone warranting, it was decided, October 24th, 1864, to remove the sequestrum, which proved to be eight and a half (8½) inches in length, from the epiphysis of the ankle-joint.

The periosteum being in a measure loose and quite easily detached, the posterior portion of it was left in the entire extent of the shaft. An incision along the spine of tibia, exposing nine or ten inches of the bone, was made, when it was readily removed by means of bone forceps. Dry dressings were used after the operation. The hemorrhage being trifling, was easily controlled.

Nourishing diet with tonic treatment was continued, as before the operation. The soft parts, which had had an unnatural congested appearance, from this time took on healthy action, and the case progressed rapidly and favorably, *new bone forming the whole length of the periosteum* which was left in the wound. From the second week after the operation, a light cerate dressing was substituted for the dry dressings.

Dec. 8th. Healthy granulations throughout filling up from the bottom with new bone. Patient able to be about the ward on crutches. As a precautionary measure, an anterior and posterior felt splint, adjusted to the limb, was advised, and a permanent surgical appliance was eventually applied for permanent use.

Jan. 19, 1865. Patient able to go about, and wound closing up to within about three or four inches. Being very anxious to get home, under a promise that he would keep us informed of the progress of the case, he was discharged. Continued improvement.

May 10, 1865, he writes; "I am at work at my trade, coach-building, and have complete use of my injured leg, running up and down stairs as well as any of the workmen. The wound has entirely healed and new bone formed throughout. I still wear my artificial support."

Another case, in which I removed five and a half (5½) inches of tibia from J. W., private Co. G, 57th Pa. Vols., Nov. 7th, 1865, under similar circumstances, resulted in a like cure.

Hospital Reports.

JEFFERSON MEDICAL COLLEGE, }
March 24th, 1866. }

Selections from the

SURGICAL CLINIC OF PROF. GROSS.

Reported by Dr. Napheys.

Polyp of Rectum.

Mary D., 5 years of age. You observe, gentlemen, the polyp in this situation, a very rare form of disease, probably of fibroid character. It now protrudes at the verge of the anus, a distance of half an inch, distinctly on the outside, perfectly moveable, and attached apparently by a small narrow pedicle. I can perceive no distinct pulsation in it, as sometimes happens in this affection. You will never see a more interesting specimen of a polyp, in its natural or rather unnatural position, as its residence is within the bowel. It came down first, the mother states, eighteen months ago. It has grown gradually since last fall, when it was the size of a large pea. Now it is at least one inch in diameter, with a thickness of perhaps seven lines at its thickest part. There has occasionally been a good deal of bleeding, especially during the last year, when the child was at the water-closet. During this period the general health has not been good. Were this tumor within the bowel, in its proper position, it would undoubtedly be readily felt by the finger, and moved about, and the diagnosis not be at all difficult. But, inasmuch as it lies exterior to the anus, the diagnosis is revealed at a glance. If it were hemorrhoidal, it would not be moveable at all.

The tumor being gently pulled down and stretched, a double ligature, well waxed, was thrown around the pedicle, close to its attachment to the mucous membrane of the bowel, the ligature was then firmly tied with a double knot, to effect through strangulation. The application seemed to give a little pain. The tumor was now cut off close up to the ligature hemorrhage being thus avoided.

The tumor is of a flattened ovoidal shape, the pedicle being attached near one of its margins. It feels rather solid than otherwise, and I suppose, if it were carefully examined with a microscope, we should find it to be composed of fibroid tissue. It is very vascular, quite red, and not at all lobulated. The pedicle of such a tumor is usually narrow and short, but I had a case, a good many years ago, where the pedicle was at least four inches in length, exceedingly narrow, and looking very much like a long slender earthworm. The tumor, when low down in the bowel, is liable to protrude during defecation, and become more or less strangulated by contraction of the sphincter muscle. It is sometimes met with in elderly persons, but children under ten years of age are the peculiar subjects of it. How it originates it is impossible for us to determine. We can say nothing more in regard to this, with any degree of certainty, than we can of polyps of the nose, uterus, vagina, or any other of the mucous outlets of the body. The tumor is a source

of annoyance to the part rather than of pain. When it is of considerable size it acts obstructively to the evacuation of the feces, and there is then generally a sense of stuffing or of weight in the part. More or less bleeding is liable to occur, especially when the child is at the water-closet, and the hemorrhage is sometimes considerable, even copious and exhaustive, if it is permitted to continue. The diagnosis is always readily determined. The first point is the history of the case, especially the age of the patient, who is usually young. In the next place, the child, if able to express its feelings, will complain of fullness, weight or stuffing in the lower bowel, and there will be occasional hemorrhage, accompanied sometimes by protrusion of the tumor at the verge of the anus. These are the most important symptoms, they are indeed almost diagnostic. When the finger is inserted into the bowel, a tumor, moveable, and seldom situated higher up than two or three inches, may be detected.

Inflammation of the Ear.

Louisa D., thirty-five years of age. This patient was before us, during my last term, on account of sebaceous tumors of the scalp. I removed three. Five still remain. She had erysipelas last July, following the operation. There is now almost complete occlusion of the auditory tube, evidently caused by inflammation there, as well as in the parts around, and some discharge, which is offensive, and soils the pillow at night. She has a little ringing in the right ear, and a very little pain. Her hands and feet are cold, she is flatulent, and her tongue is not clean. This is not a case of otitis, in the true sense of the term; more likely, it is inflammation of the structures of the auditory tube. What the condition of the tympanum is cannot be determined without examination by a good light, either artificial or natural, which could not be made on account of tumefaction in the auditory tube. As there is discharge, there is evidence of ulceration. That it does not involve the drum of the ear or ossicles, may be inferred from the fact that the woman can hear on that side. Probably the ulceration exists in the ceruminous glands, and the structures in their neighborhood. The inflammation on the outside is perhaps sympathetic irritation.

If there were decided pain in the parts, deep seated, and attended with great roaring and buzzing noises, we should then perhaps infer that the disease might be otitis, or inflammation of the interior of the ear; but there is no evidence of this kind. The general health is impaired; the blood impoverished. In order to relieve this inflammation of the ear, it is necessary not merely to treat the part itself, but also to address our remedies to the constitution. Her tongue is coated; the extremities are disposed to be cold, and she looks pale; circumstances clearly indicative of the propriety of administering alterants, and some of the chalybeate preparations. We will, therefore, put the woman upon the use of two and a half grains of blue mass, with an equal quantity of jalap, every other night, until the tongue becomes clean, and then every fourth night. The object is not to purge her freely, but simply to excite the secretions, as a large purga-

tive would exhaust her. The best preparation of iron is the tincture of the chloride, and to enhance its value, it may be taken in union with quinine, in the proportion of twenty grains to the ounce. Of this she may take twenty drops four times a day, in sweetened water. Under this prescription her color will improve, her extremities become warmer, and her digestive organs increase in vitality and vigor. Let her guard against cold, which is a matter of great importance. The diet should be plain, simple and nutritious. I should have no hesitation to give this woman a little alcoholic stimulus, some good ale, a little claret, or port or sherry wine. As a local remedy, the best deodorizer, detergent, and alterant, is the permanganate of potassa. I prefer it to chlorinated soda. A drachm may be dissolved in two ounces of water, and of this a teaspoonful may be added to half a tumbler of warm water, to be injected three times during twenty-four hours, first washing the ear out with lukewarm water, and a little soap. A blister half an inch in diameter was ordered to be applied in front of the ear, as well as behind, with a view to the establishment of counter-irritation.

UNIVERSITY OF MARYLAND, } January, 1866. }

SURGICAL CLINIC OF PROF. N. R. SMITH.

Reported by J. W. P. Bates, M. D., of Baltimore, Md.

Cataract.

Woman, 70. This old woman you saw me operate on about a year ago for cataract. I introduce a needle through the sclerotic and break it up if soft—if hard I depress it. In this case the cataract was a tough one and considerable inflammation of the iris resulted, which we combated by the ordinary means. It presented a very unfavorable appearance for about six months, but now she can see as well as most persons of her age. The pupil is a little contracted, but no appearance of cataract. I introduce her today to let you see what can sometimes be accomplished in very unfavorable cases.

Catarrhal Ophthalmia.

Man, 40. This case was aggravated, no doubt by the introduction of foreign matter. There is considerable inflammation and a mucopurulent discharge. When there is a moderate degree of inflammation, the discharge is mucus—when very high, it is purulent. There is a white spot on the cornea which shows that suppuration has taken place. There is a good deal of danger of losing the sight of this eye, but not altogether certain—may result in hernia of the iris. Bowels costive.

R. Hydrarg. chlor. mit. gr. vj.
Pil. j.

R. Argenti nitrat. gr. ij.
Aque, f. ʒij. M.

S. Apply to the eye and use watery solution of opium afterwards.

Apply ung. hydrarg. ox. rub. to the lid.

Shell Wound.

Man, 30. He was struck three years ago by a

shell on the left hip. The neck of the femur or the great trochanter was fractured. The limb is now shorter than the other; the foot is unnaturally everted; no soreness; no dead or carious bone; no fistulous opening; some tenderness on pressure; motion in the joint impaired. There is not much that we can do in such a case as this; he will probably get better but will always be lame. The bone united in a malposition, and we can only leave the case to the modifying influences of time.

Epilepsy.

Man, 25. This man became my patient for secondary syphilis, and was treated by mercury. It is always indicated when it has not been used in the primary disease. He now has epilepsy—has had several hundred fits—had them very frequently between his 14th and 21st year, but since then they have become less frequent, and he has only had one in the last eight months. Has an eruption on his head, for which he has been using mercury for about two weeks. In the treatment of epilepsy our practice is rather empirical. Certain remedies were found to accomplish good, as the burnt sponge in Derbyshire neck, but it was used empirically, and it was not known what the remedy was, until iodine was discovered. The remedy which I employ in this disease is

R. Argent. nitrat., gr. ʒ.
Stramon. seminis, gr. ʒtoʒ.
Assafoetideæ, gr. iij. M.

Ft. pil. j. S. Repeat three times a day.

Calculus.

Man, 35. This man has been troubled for some time with a difficulty in urinating, which is caused by a calculus in the bladder, and now wishes to have it removed. We shall perform the lateral operation, and for the purpose will use a staff having a groove which commences on the back of the instrument and gradually winds around to the side. Attached to the staff, by a hinge joint, is a lancet, which is pressed into the perinæum, after the staff has been introduced, and strikes the groove in the staff. On the top of this lancet is a groove which allows the beak of the gorget to be inserted and guides it into the groove in the staff. The patient was put in the usual position and the parts freely divided, and the stone extracted by the forceps. On account of its large size it required considerable force to remove it. There is less hemorrhage when the stone has to be drawn out with force than when the parts are so freely divided as to allow it to be removed easily. In this case the loss of blood is not great. We will introduce a tube through the wound into the bladder and then should hemorrhage occur, we can easily control it by packing lint around the tube. When you do not use the tube it is often a difficult matter to check the flow of blood.

— COLORED PHOTOGRAPHS from life, of skin diseases, are now being issued in London by Churchill and Sons, in a series. No 1 comprises Rupriol and Lupoid Syphilides.

Medical Societies.

PATHOLOGICAL SOCIETY of NEW YORK.

Ulceration and Perforation of Appendix Vermiformis;—Salivary Calculus;—Intussusception in an Infant;—Infantile Tuberculosis;—Cancer of Pylorus;—Tumor of the Brain;—Osteo Sarcoma;—Ossific Deposit in Heart;—Empyema, Hepatic Abscess;—Fracture of the Sternum;—Resection of Scapula.

At the meeting of this Society, held April 25th, among the specimens presented were the following:

Ulceration and Perforation of Appendix Vermiformis.

Prof. Post presented this specimen for a candidate. The patient was 21 years of age, a sailor, who first contracted a bronchitis, April 27th, 1864. For three days he had pain in the axillary region; on about the eighth day, pain in the abdomen set in. There was costiveness, which was treated by mild laxatives. Then there occurred night sweating and anorexia. The pain in the abdomen continuing, opium was given, when the suffering abated. Pulse 88. Sinapisms were applied, and the patient kept under the constant influence of opium. The pain, however, became more intense, morphia in large doses was resorted to, and on May 13th, about seventy hours after the localization of the pain, collapse, hiccup, etc., supervened, and spite of all means, stimulation with ammon. carb., etc., he died.

An *autopsy*, held 19 hours after death, revealed the presence of purulent serum in the abdominal cavity, the intestines were slightly glued together, the omentum drawn together and contracted in the right iliac fossa, like a curtain; there was extensive ileo-colitis, and the vermiform appendix was perforated by several ulcers. Hardened feces were found in the neighborhood, and some had escaped into the peritoneal sac.

Salivary Calculus.

Dr. Post also presented a salivary calculus of considerable size, which had been removed from a patient, 50—60 years of age, about two weeks ago, by incision into the duct.

Intussusception in an Infant.

Dr. L. SMITH presented a specimen taken from an infant, 4½ months old, which had been admitted to hospital on the 6th of April, in good condition, having been nursed up to this time by its mother. Soon after admission, it was seized with vomiting at short intervals; there was no constipation, though the evacuations were scanty. The vomiting was thought to be due perhaps to

entero-colitis. April 13th, the vomiting still continued, but there was no diarrhœa; on the 14th, it had one or two scanty evacuations, of dark appearance, but containing no blood; on the 20th, convulsions occurred, and the infant died.

Post Mortem Examination.—Brain not examined. The stomach and upper part of the small intestines appeared healthy. About two feet above the ileo-cæcal valve, there was an intussusception, $2\frac{1}{2}$ inches in length, the invaginated portion of gut presenting a livid appearance; above, it was normal with the exception of some vascularity. Below, the ileum was dusky and tinged with blood.

Another intussusception was discovered near the junction of the transverse and ascending colon—3 inches in length, and $1\frac{1}{2}$ of an inch in diameter. There was not much evidence of inflammation, and below the colon was nearly normal. On injection of water with a syringe, the invaginations were found almost entirely impermeable.

A good deal of interest attaches to the case, because it is stated by recent authors that intussusception never occurs in the small intestines of infants. It was certainly present in this instance, and from the appearances of lividity and the bloody tinge, it seems certain that it existed some considerable time before death, and did not take place during the agony.

Infantile Tuberculosis.

Dr. SMITH also presented a specimen of pulmonary and bronchial phthisis, in an infant one year old. Had been admitted to hospital ten days before death. There was no meningitis, no tubercular deposit in the membranes of the brain, but some serous effusion and considerable cerebral congestion, which was thought to be due to the pressure of an enlarged bronchial gland.

Cancer of Pylorus.

Dr. LOOMIS presented a specimen taken from a patient of Bellevue Hospital, 35 years old, who had been ill four months. There had been vomiting, at first simply of the contents of the stomach, after eating, without pain; after a time, there was a dull aching pain in the epigastrium, but at no time vomiting of blood. No cough. No hereditary predisposition. Lost flesh and strength so rapidly as to present the appearances of phthisis. At the time of admission, cancerous disease was strongly suspected, from the peculiar appearance of the skin. The thorax was examined, but no disease found there.

Two inches and a half below and to the left of

the xyphoid cartilage a tumor was found, on examination, moveable, seemed to be flattened on its surface, and measured three inches laterally, and two inches horizontally. On the upper portion of the tumor a blowing murmur, synchronous with the first sound of the heart, was heard, but not posteriorly, and which could only be heard when the patient was lying on the bed. He took freely of food, both solid and fluid, without vomiting. Emaciation and failure of strength however were rapid, and three weeks ago he died. The *post mortem* examination showed the pylorus constricted and the seat of a cancer. There was no ulceration, no attachments to the peritoneum. The absence of lancinating pain and of vomiting of blood were remarkable.

Dr. BIBBIN observed that in a case of pyloric cancer presented to the Society by Dr. CONANT, two years ago, the same absence of pain and bloody vomiting had been noticed, and Dr. CLARK had on that occasion remarked, that in cancer of the pylorus pain is often absent, and that this formed one of the distinctive signs between cancer and aneurism in this region.

Tumor of Brain.

Dr. SANDS presented, for a candidate, a specimen obtained from the brain of a boy, 11 years of age, on the 20th of January last. There had been convergence of the left eye, inability to carry the eye toward the median line, slight paralysis of the organ, he could not close the eye tightly, and he had lost somewhat the power of controlling the voice, which was slightly thick. There was dizziness. The symptoms became aggravated, leg and arm of right side became weak, voice feeble. Paralysis of the extremities on right side, in a few weeks, was decided. Then pain commenced in the left arm; there was vomiting, suffusion of the eye, and after six weeks, the left extremities had also been paralysed. He died, almost completely hemiplegic.

The autopsy revealed a good deal of fluid in the arachnoid, and the existence of a tumor, situated over and pressing upon the left crus cerebri.

Osteo-Sarcoma.

A second specimen presented by Dr. SANDS was the amputated left forearm of a gentleman, 26 years of age, of healthy parentage, and no hereditary disease, except that one of his grand-aunts was said to have died of cancer of the breast. At very early age, he received a fracture of the left forearm, which resulted in incomplete power of pronation and supination. Twelve years ago, a tumor made its appearance on the upper side of the elbow, which grew without giving much pain, and during the last seven

years, he was unable to carry his arm in any direction without aid by the other. The tumor comprised two swellings on the upper and lower aspect of the joint, and seemingly connected with the condyles.

During the last ten months the tumor was excessively painful, and in the last six months doubled in size. Its greater circumference is about 16 inches, its lesser 8 inches. At one point, it presents a soft surface, giving a sense of fluctuation; the rest is dense and shining. The tumor, on dissection, is found to be largely consisting of bone; on microscopical examination, it is found to be composed mainly of cells, uniform in size, and the ordinary elements of fibro-vascular tumors—recurrent fibroid tumors, osteo-sarcoma, or sarcoma, as they are called by different authors. There were no glandular enlargements and no emaciation.

Ossific Deposit in Heart.

Dr. FINNELL presented for Dr. JOHN BEACH, the heart of a man, 65 years of age, who had been found dead in bed. On autopsy, nothing was found but some congestion of the spleen, hob-nail liver, and deposit of ossific matter around the root of the coronary artery, with almost complete attachment of the pericardium to the heart, the result of previous inflammation and adhesion.

Empyema with Hepatic Abscess.

Dr. DRAPER presented specimens with this history: In November last, a man, 25 years of age, was taken sick with symptoms of pleuritic effusion of right side; the history of the case was that of acute pleurisy. He was sick about a fortnight before admission into the hospital, upon entering which, it was found that about one-half of the right pleural cavity was filled with effused fluid. The side was painted with iodine; diuretics, etc., were employed, with no favorable result, however, and in a short period the existence of empyema was sufficiently plain. The level of the fluid did not rise above the original point, but the amount evidently increased, as shown by marked distension and bulging out of the chest. He commenced to expectorate freely, but the sputa did not present the characteristics of an empyemic abscess, and it was impossible by the physical signs to discover any communication between the cavity and the bronchi.

The condition of the patient, after having at first began to improve, subsequently grew worse, symptoms of hepatic abscess followed, and the patient died.

On post mortem examination, the upper part of the lung was found free. At the fourth rib,

the pulmonary and costal pleurae were found closely adherent; these adhesions extended to the posterior thoracic cavity, and corresponded to the dulness which had been found during life. Below this point a large abscess was found, extending downward, having for its inferior border the margin and surface of the right lobe of the liver, which was covered with a pyogenic membrane.

The abscess appears to have been originally a pleuritic abscess, ulcerating through the diaphragm, and involving the upper surface of the liver. The fifth, sixth, and seventh ribs were separated from their cartilages by ulceration, and the thoracic walls in this region were so thin, that it was obvious the abscess would soon have found an external outlet, had the patient lived for a short period longer. The formation of a pyogenic membrane on the liver is interesting; so also the presence of bile in the sputa, which was discovered during life. With the exception of a few small metastatic abscesses, the substance of the liver was not involved.

Fracture of the Sternum.

Prof. HAMILTON presented the fractured sternum of a man who had been received into the Long Island College Hospital, for injuries from falling down the hold of a vessel. There were fractures of the tibia and fibula. Tenderness on top of the sternum existed, but no swelling or discoloration. There was great pain on the back of the head and neck. The day after the fall he expectorated blood, and on the next day he died.

Autopsy. Slight effusion of blood beneath the costal pleura, lungs congested and some blood in the bronchial passages. A transverse fracture and dislocation of the first piece of the sternum upon the second was found. There was also dislocation of the third rib and cartilage and the four upper ribs were broken posteriorly, near the spine.

This fracture of the sternum is usually produced by a fall upon the back, and forcible doubling up of the head and neck upon the chest. The fractures of the ribs near the tubercles show a flexed condition of the spinal column at the time of the injury. The lower fragment of the sternum underlies the upper, and from the posterior lip of the inner surface of the upper fragment the periosteum was torn off to the extent of nearly an inch.

Resection of Scapula.

Prof. HAMILTON presented a scapula which had been removed entire from a soldier, who had been wounded at Fredricksburg by a shell. Nervo

sis of the scapula ensued, necessitating its entire removal with the acromion and caracoid processes. The patient has power to use the caracobrachialis and biceps, also tolerably well the triceps and deltoid. He is able to carry the arm without a sling, although attachment of these muscles is simply to cicatricial tissue, there having been no formation of new bone.

EDITORIAL DEPARTMENT.

Periscope.

The Detection of Blood-Stains by the Micro-Spectroscope.

The trial of ROBERT COE, for the murder of JOHN DAVIES, at Aberdare, is remarkable, says the *Pharmaceutical Journal*, from which the *Dublin Press and Circular* quotes, as the first case in which the micro-spectroscope has been employed to furnish evidence of the presence of blood-stains. The following is Dr. HERAPATH's evidence:

Dr. BIRD HERAPATH SWORD: "I am a Fellow of the Royal Societies of London and Edinburgh. I practice as an analytical chemist and also physician. The hatchet produced was given me by Mr. Wrenn, and I carefully examined it. On the metallic portion I did not find any marks upon which I could rely. I removed the handle, and experimented on thin slices of wood which I took from underneath the metallic ring. I examined those sections with a microscope, and found the majority of those stains were due to oxide of iron; some of them showed clotted blood; in some cases the woody portions had been infiltrated with the coloring matter of blood changed by the action of water. On some of the sections of the handle I found globules of blood, and by the micrometer I measured the size of those globules. I placed a section of the handle in a glass cell, in which there was a fluid medium, and the blood-globules floated off into the cell, and by the measurement of these I could determine the size of the globules therein contained. These globules were exactly the same size as some globules from dried human blood, which I purposely procured, and tested with the same apparatus in the same way. Finding this evidence of blood to be small, I obtained more numerous sections of the colored surface of the handle of the hatchet, immersed them in distilled water, and obtained thereby a slightly colored solution, which, after filtering, was ready for chemical tests, and for optical examination by the micro-spectroscope. I subjected this fluid to the action of light, and it had undoubtedly the properties peculiar to a solution of blood. When a solution of blood was examined in this instrument, the fluid absorbed some of the rays of light, and thus altered the spectrum or rainbow. Within the green, and on the border of the yellow rays, two dark absorption bands were produced by the

blood-fluid. Only one other substance would produce two dark bands—that is cochineal dissolved in ammonia—but the position of the two bands was different. The spectroscope alone would not enable me to readily distinguish between the two, but combined with chemical examination, it would satisfactorily do so. From this optical test I was satisfied that the sections of the hatchet had been stained with blood; and by chemical analysis, I also demonstrated it was blood. The combination of the three tests showed that the substance on the hatchet must have been blood."

Pseudo-membranous Affections of the Bronchi in Laryngeal Croup.

Dr. PETER, in the *Wiener Med. Jahrb.*, 1865, gives the results of his pathological researches. Diphtheria, according to his views, generally attacks the bronchial passages, coincident with its passage down the fauces. In 125 autopsies he found the bronchi affected as follows:

Catarrh, 44 times.
Diphtheritic exudation, 52 times.
No change, 11 times.
Not examined, 14 times.

Pseudo-membranous bronchitis was observed in five-twelfths of the cases of laryngeal croup. Emphysema and broncho-pneumonia were usually found in the neighborhood of the diphtheritic affection.

The lungs in 121 autopsies were normal but 12 times. The other 109 cases presented

Emphysema.
Congestion, 27 in 109 cases.
Broncho-pneumonia, 79 in 109 cases.

Regarding the period of occurrence of pneumonia, PETERS gives the following table:

The 3d day, 4 times.	8th and 9th day, 4 times.
" 4th " 11 "	10th day, 6 times.
" 5th " 12 "	11th " 3 "
" 6th " 10 "	12th " 2 "
" 7th " 3 "	14th " and upward, 19 times.

Showing that the pneumonia occurred early, and generally before tracheotomy is resorted to.

Regarding the diagnosis of pulmonary complication of croup or diphtheria, PETERS considers the frequency of the respiration as almost diagnostic; in simple croup, without pneumonic complication, it is from 32 to 48 per minute; with pulmonary complication, always higher,—from 50 to 60 per minute.

Forty Cases of Artificial Premature Labor.

Dr. SIMON THOMAS, of Leyden, relates forty cases, according to the *Dublin Press and Circular*, in which labor was artificially induced. The indications were chiefly contractions of the pelvis; and these were determined less by the histories of previous labors than by accurate measurements expressly made. Thus, in five cases, the patients were primiparæ. The first method employed was to place a bougie, for a short time, a few inches between the uterus and membranes, changing it every day for a larger one. Labor came on in ten days, and the forceps was used. In another case, KIWSCH's douche was used. Labor followed in five days. The mother

died of pyæmia. In other cases the bougie was used, or the douche; generally, days elapsed before labor. Afterward KRAUSE's method, the leaving an elastic catheter in the uterus, was used. The time expended was from 6 to 92 hours, the majority taking from 24 to 48 hours. Of the 32 children born after KRAUSE's method, 25 lived; of the 32 mothers, 25 had a quite natural puerperal history; 4 died of pyæmia or endometritis.

Reviews and Book Notices.

A Manual of the Principles of Surgery, Based on Pathology. For Students. By WILLIAM CANNIFF, Licentiate of the Medical Board of Upper Canada; M. D. of the University of New York; M. R. C. S., England; Late Professor of General Pathology and Surgery, Univ. Victoria College, Toronto, C. W.; etc., etc. Lindsay & Blakiston, 1866. 8vo. Pp. 402.

Whether it be a long or a short time before Canada becomes connected, politically, with the United States, all American physicians should be of one fraternity. We welcome, with pleasure, any creditable addition to Canadian medical literature.

Dr. CANNIFF's selection of a subject does not seem favorable to easy success or popularity. At least surgery (chirurgery) has always appeared to us to involve in its practice so much of handiwork, that the separation of its principles from its practice is less natural and convenient in study, than in the case of medicine and medical pathology. Students seldom fully appreciate such works.

The preparation of this manual was suggested to its author during his engagement as Professor of the Principles and Practice of Surgery, by the want of time in a single session, to do justice in lectures upon the whole subject. Without claiming originality, it is carefully written, upon the basis of the teachings of high and late authorities. He avails himself especially, of the assistance of HOLMES' System of Surgery, but quotes also freely from VIRCHOW, PAGET, MILLER, HILTON, and others. The illustrations are, as mentioned by the author, borrowed from PAGET's Surgical Pathology.

Opportunities of experience and observation in military surgery, obtained in service as a medical officer in the United States army during the late rebellion, have afforded Dr. CANNIFF occasion for a number of good practical suggestions.

In the modest language of the Preface, "the profession is requested to remember that this is the first undertaking of the kind in our young country. The writer enjoyed not the advantages of early literary training. As his grandfathers and his

father were pioneers in the wilderness of Canada, and paved the way for a more scientific agriculture, so the writer hopes this volume will be the forerunner of other and more excellent treatises, that will hereafter proceed from the profession of our province."

Dr. CANNIFF has certainly produced a very respectable text-book; and his publishers have done it the fullest justice in the style of its bringing out.

Asiatic Cholera. By F. A. Burrall, M. D. New York: William Wood and Co. 1866. 12mo. Pp. 155.

This book must stand upon its own merits, and not on the reputation of its author; as, unless our ignorance be peculiar, he has not been previously known in medical literature.

It is, however, a book of merit; as an industrious, and, in the main, judicious compilation of the statements and opinions of leading observers and theorists upon cholera. Dr. BURRALL appears to have made an extended research among the recent medical publications upon the subject, in Germany and France, as well as in Great Britain and this country. Some want of *system*, we notice, in his writing; and there is neither table of contents nor index.

The communicability of cholera is especially urged by Dr. BURRALL; although he does not insist upon the use of the term contagion. All the facts which can be made to support the expectation of communication of the disease, by persons as well as by ships, are brought forward. We do not know of any work, accessible here, in which the portability of cholera, and the advantage of *personal* quarantine along with that of suspected vessels, are more elaborately sustained. Yet the author does not display any unscientific zeal, or disposition to do injustice to the facts on the other side.

The arrival, lately, of two vessels from Liverpool, (the *England* and *Virginia*), attacked by cholera in mid ocean, when the disease did not exist at the port from which they started, nor at any place from which the passengers came, suggests that now would be a good time for an essay on the *anti-quarantine* side. We believe that a medical writer of some experience is about to issue such an one. Certainly, it is very important for the question to be settled, if possible, before the warm weather and the cholera come together.

Wood and Co. have made of Dr. BURRALL's treatise a *handsome* little book, within and without. It will probably have many interested readers.

Medical and Surgical Reporter.

PHILADELPHIA, MAY 12, 1866.

MEDICO-LEGAL DECISION.

A somewhat important decision was recently given, according to the *Boston Medical and Surgical Journal*, in a case before the Supreme Court of Massachusetts, in regard to the right of the physician to perform autopsies. The case was one on the part of the parents of a child, five years of age, against the Superintendent and Surgeon of the City Hospital, Boston, for damages, *in tort*. The child had been brought to the hospital, accidentally shot through the head. The plaintiff in the case alleged:

1. That the child was carried to the hospital against her will.
2. That it was kept there against her will.
3. That she was at first, denied access to it.
4. That she desired a coroner's inquest.
5. That she did not consent to an autopsy.
6. That she was unwilling that the head should be opened.
7. That the body was needlessly mutilated.
8. That being then pregnant, the sight of it had hastened delivery, and that the health of both mother and child had been injured in consequence.

The defendants contended:

1. That she brought the child to the hospital in her own conveyance, *sua sponte*.
2. That she was advised and urged to leave it there for the child's sake, but not forced to do so.
3. That she was denied access to it only during the etherization and exploration; but that subsequently she was allowed to remain with it until it died, and was fed and lodged at the expense of the hospital.
4. That the parties who fired the shot having been released by the Chief of Police, as it was found to be accidental, the authorities did not consider an inquest necessary.
5. That she requested the autopsy.
6. That she said nothing about opening the head until she saw the body, after the autopsy.
7. That there was no mutilation of the body. That the autopsy was performed according to rule. That the existence of cerebral symptoms, and the violence attending the injury, rendered the opening of the head justifiable, even if she had objected. That the search for the ball was given up for fear of mutilation.
8. That the defendants were not responsible for the consequences alleged.

In his charge to the jury, Judge CHAPMAN ruled as follows:

"His Honor instructed the jury that there was no record of any case similar to this in common law. The laws of the Commonwealth as to interfering with dead bodies are severe, and it is treated as a crime so to interfere, punishable and perhaps actionable; at least it was so to be considered for this case. It is common to have an autopsy made for the purpose of ascertaining the cause of death, though formerly there were many superstitious notions in regard to it, especially among the ignorant. The plaintiff contended that the body of the child was mutilated without her consent, and without any reasonable cause, and this was the question to be submitted to the jury. The child was sent to the hospital by the mother, as she testifies, for the purpose of having the ball extracted, and the jury were to judge whether it was an act of kindness to take it away or not. She also says that she consented to have the ball extracted after the death of the child, but this was only because she desired that the murderer should be found, and it was a question for the jury to determine what the defendants might do in compliance with such consent; whether the request to extract the ball with the view to find the murderer, was not enough to warrant them in finding out the cause of the death, and everything which the public interest might require."

The jury, after being out about five minutes, returned a verdict for the defendants.

Fully as we agree with the decision in this case, as tending, in the language of Dr. D. W. CHEEVER, one of the defendants, to prevent black-mailing of hospitals and public officers, by any one who can find a pretext of discontent with the result of treatment of their friends, either before or after death, we think that the true grounds for the defence should be based on still broader principles than those set forth in Judge CHAPMAN's charge.

The laws operative in Boston, as elsewhere, in all large cities, regarding the registration of deaths, and the granting of burial-permits, distinctly demand that the cause of death be precisely stated, not only in cases of death which become subject to medico-legal inquests, but in all cases. None can state this cause properly, but the regularly qualified physician attending the case; and if, in his opinion, to fully determine the cause of death, an autopsy is needed, the law will and must protect him in making the autopsy. It obliges him to give a certificate of death, stating cause, and hence, it must protect

him in any measures necessary to discover the cause. This, we hold, is as sound legal doctrine as it is common sense.

QUARANTINE.

The present condition of quarantine affairs in New York proves in the most appalling manner the force of our appeals, months ago, in favor of speedy Congressional action, not only to establish an efficient quarantine code, but to provide for its practical execution under the superintendence of the medical authorities of the Government.

If demonstrative evidence was needed to show the absolute necessity of the measures which we have so repeatedly urged, the arrival of the steamship *Virginia* in the harbor of New York, with cholera on board, has furnished such evidence. For here is the epidemic occurring on one vessel alone, and we see how completely inadequate are the facilities for the care and treatment of the passengers and patients. What will the condition of things be at a more advanced period of the season, when a dozen vessels may arrive in a week, with the disease on board, and all subject to quarantine restrictions? What accommodations are there for the care and treatment of sick emigrants alone, to say nothing of the retained well passengers? Absolutely none, except a few receiving and hospital ships, whose capacities will soon be overreached by the demands of sickness as the season advances.

There is but one way in which a great public peril, and a great public outrage, which grow from this inefficiency of quarantine regulations and accommodations, can be met. That consists in the Government taking possession (by the authority it undoubtedly holds to regulate international intercourse and traffic) of the *particular locality* most suitable to the establishment of quarantine buildings. There is not a shadow of difference of opinion among medical men and sanitarians, as to where *that locality* is, as far as the ports of New York and neighborhood are concerned. It is *Sandy Hook*, and no amount of State-right resolutions, on the part of politicians in New Jersey, can do away with the opprobrium which the conduct of this State has thrown upon itself by the steady, foolish, and inhumane denial to aid in keeping pestilence off the borders of this continent, nor will we owe much thanks to Congress or Government, if they refuse their authorized interference in a matter which concerns the welfare, not of one State or a particular community, but of the whole people. It is not yet too late to accomplish an immense amount of

good, if Congress or the Executive take this matter in their hands. If not, we fear that circumstances may soon arise which will *force* such interference, and when every hour will be as precious as days and weeks at present. Why not prepare for exigencies which are casting their shadows before?

LOCAL ANÆSTHESIA BY ETHER; CÆSAREAN SECTION.

The new method of local anæsthesia by ether spray is being still further experimented on and extended. An account of a cesarean section performed under its influence, is given in a recent number of the *British Medical Journal*. The case occurred under charge of Dr. GREENHALGH, in a woman, 30 years of age, between seven and eight months advanced in pregnancy, with the presence, at the neck of the uterus, of a large (probably malignant) tumor, on account of which, fearing rupture of the uterus, etc., if natural labor should set in, Dr. GREENHALGH, on consultation with other obstetricians, decided to perform the cesarean section, and Dr. RICHARDSON was called in to apply his method of producing local anæsthesia.

The patient was placed in a semi-recumbent position on a table, with her legs hanging over the edge. She was supported by an assistant on each side; and her eyes were bandaged at her own request. Pulse at 74, never varied in power, frequency, or time, during the whole operation. To produce anæsthesia, a large instrument was used, with double jet, which he had roughly constructed for the purpose. It acted well; and complete insensibility was produced in forty-five seconds, over a space two and a half inches broad, from the umbilicus to the pubes. The incision was made direct on the uterus—the patient exhibiting no consciousness of the operation. The uterus being exposed, the ether spray was directed on it for a moment, with the effect of inducing contraction. An opening was then made into the organ; and with some difficulty, on account of the contraction, Dr. GREENHALGH introduced his hand and removed by the feet a fetus, which was alive and lived an hour. The membranes burst with the delivery; the placenta was removed separately. The uterus immediately contracted as in natural labor, and required no sutures. The wound in the abdominal walls was kept open during twenty minutes, a large sponge being held in it so as to guard against bleeding when reaction took place. It was then closed with sutures of Chinese silk, the skin being perfectly narcotized with ether spray at each point

where the needle was introduced. The patient, over a week after the operation, was doing well.

The following facts are noticed by the *British Medical Journal*, as shown by this case:

1. There was no pain produced by the operation, and what was felt was only such as would occur in a very easy labor.

2. No vomiting occurred, although before the operation the patient had complained of nausea.

3. There was no hæmorrhage; so that the operation was not interfered with.

4. There was no shock.

5. The circulation remained steady throughout the whole time of the operation.

6. There was no restlessness. The patient moved once only during the operation—shuddering slightly when the child was born.

7. Consciousness was retained, so that the patient was able to do what she was desired. When asked not to strain, she relaxed the muscles immediately.

8. The case shows that local anæsthesia can be produced in a wound six inches long, extending to the depth of the abdominal walls, without being followed by slough or by peritoneal mischief; the wound healing by the first intention.

Notes and Comments.

Cholera in New York; Prompt action of the Board of Health.

On Tuesday, the first of May, the first fatal case of Asiatic cholera occurred in New York, the victim being a Mrs. Jenkins, aged 35 years. The origin of the case was clearly traceable to local causes. The deceased had been for some days previously, and at the time of the attack, engaged in removing the contents of an old privy-vault, for the purpose of using them as a fertilizer upon a lot of ground, from which she had determined to raise a crop of potatoes. She lived in a house occupied by four other families, but her apartments were in a very fair sanitary condition. The cellar, however, was partly filled with stagnant water, and the remainder of the house was filthy. At 10 o'clock Monday afternoon she was attacked by diarrhoea, and between 9 and 10 o'clock, on Tuesday morning, she died—an illness of only 20 hours. The post-mortem examination, conducted by Dr. HARRIS, revealed the usual lesions of cholera.

Dr. WHITE, who attended the case, at once notified the Board of Health, and vigorous measures were immediately taken to remove the local exciting causes, and prevent the spreading of the disease. The house was opened and ven-

tilated, and the tenants were removed. The bedding and clothing used by the deceased during her illness were burned. Chloride of lime, and other disinfectants, were strewn about the premises. A guard was placed about the house, to prevent approach until it should be thoroughly disinfected. At the same time an inspection of the sanitary condition of the whole vicinity was instituted, with medical visitations every twelve hours, to promptly meet any cases of diarrhoea as early as they might occur. The house was thoroughly washed, a steam fire-engine being used for the purpose, and the families placed in tents, under the charge of the Board of Health.

With such prompt action of the Metropolitan Board of Health, and the faithful co-operation of the profession and the public in all necessary sanitary measures, there is little fear of cholera, if it does occur, being able to assume its former virulence. The only thing needed now are proper quarantine accommodations, and a quarantine code carried out under the supervision and control of the Surgeon-General.

Since the above was written, a second case has occurred. The circumstances are briefly these:

On Tuesday night, Mrs. John Coyle, a native of Ireland, about 25 years of age, residing in the double tenement-house, No. 115 Mulberry street, between Canal and Hester streets, was seized with diarrhoea and vomiting. She immediately sent to the New York Dispensary for medical aid, and Dr. GOMEZ was dispatched to attend her. He found the symptoms to be those of undoubted cholera, and immediately reported the case to the Board of Health. Dr. ELISHA HARRIS, Registrar of the Board, visited the premises, and gave orders for the proper care of the woman during the night. Dr. STEPHEN SMITH, and Dr. GOMEZ, remained in charge of the patient during Wednesday night and next day, and at the time of the last accounts the symptoms were reported somewhat more favorable, with a slight chance of recovery. The other persons in the house have not been removed, but measures have been taken for a thorough cleaning and ventilation of the premises, which, with a liberal use of disinfectants, it is believed will prevent any further manifestation of the disease on the premises.

American Medical Association.

A full and authentic report of the proceedings of the meeting of the Association at Baltimore last week, will appear in our next issue, prepared by the Secretary, Dr. ATKINSON. It was impossible to have it prepared in season for this number,

Braithwaite's Retrospect.

We have received a circular from Mr. W. A. TOWNSEND, of New York, publisher and proprietor of the American edition of *Braithwaite's Retrospect of Practical Medicine and Surgery*, announcing that they will hereafter append to that work a *Retrospect of American Medicine and Surgery*, as obtained from journals, transactions of medical societies, etc. This department has been assigned to AUGUSTUS K. GARDNER, A. M., M. D., of New York, who is well known as a medical writer.

Attached to each number will be a complete list of the medical works published in this country and abroad during the previous six months, with the price affixed, and with a *very brief* indication of their aim and character.

Correspondence.

DOMESTIC.

"Army Itch."

EDITOR MEDICAL AND SURGICAL REPORTER:

I consider the so-called "army itch," of which so much has been said, by various correspondents of the REPORTER of late, to be nothing more than an aggravated form of the common itch, or *scabies*; the aggravation being produced by long standing and neglect.

I have seen a great number of cases within the last two years; and as the common itch prevailed extensively in this vicinity previously to the war, ample opportunities have been afforded for comparison. The so-called army itch is much more intractable in the treatment, requiring a longer period for its cure; but I have never, to my knowledge, met with a case that did not yield to the persevering application of the simple *unguentum sulphuris*. All the prescriptions that your correspondents give, I believe, contain a large proportion of sulphur, and to the use of this article I attribute their success.

The disease (in my opinion), is produced by the *acarus*; and for the destruction of that insect, sulphur is the conceded specific.

Let the patient be thoroughly washed with warm soap-suds, to which may be added the carbonate of potassa, if the case is of long standing, then apply the ointment every night for five nights, in simple cases, and for two or three nights longer in cases of greater violence. In aggravated cases I do not advise washing off the ointment until the rubbing process has been completed; then the washing of the body, change of

linen, and fumigations, I use no medicine internally.

This is my sole treatment for what is known as "army itch" in this section; and, as stated above, with uniform success. The same means may be applied to a different disease in other sections; but it is observable that all the writers on the subject in your journal use sulphur, in some form, in their treatment; and deeming it best to simplify our prescriptions as much as possible, I have here ventured to give my opinion as to the pathology of the disease, and my experience in its cure.

Very truly yours,

W. STUMP FORWOOD, M. D.

Darlington, Md., April 20, 1866.

News and Miscellany.

Mortality in New York and Brooklyn.

According to Dr. HARRIS's Report, the total number of deaths that occurred in the city of New-York for the week ending April 28, was 452, of whom 120 were men, 87 women, 126 boys, and 119 girls. The deaths of colored persons number 9. This shows a mortality of 1 in every 1,607 of the population, and an increase of 31 over the previous week, and of 21 over the corresponding week of last year. There were, during the same period, 44 children—31 males and 13 females—still born. Of these there were 14 deaths by accident or negligence, and 95 from zymotic diseases, of which diarrhoeal affections had 31 victims, typhoid fever 9, typhus fever 4, croup 6, diphtheria 11, scarlatina 10, and small pox 1. There were also 6 deaths from starvation and privation—certainly a frightful record for one week—and 3 from intemperance. Lung diseases and tubercular affections had 109 victims, convulsions 44, bronchitis 14, pneumonia 28, enteritis 16, BRIGHT's disease of the kidneys 16, premature birth 5, old age 7, and suicide 1 victim. Of the whole number, 99 took place in the public institutions of the city.

The number of deaths in Brooklyn during the same period was 142, of whom 45 were men, 25 women, 45 boys, 27 girls, and 2 colored. Eleven children were still-born and 5 were prematurely born. Zymotic diseases, 27 victims; tubercular affections, 36; convulsions, 13; old age, 2; and suicide, 1 victim.

In transmitting these statistics to the Board of Health, Dr. HARRIS says: "The death-rate of the week is a trifle below the average of the month, and greatly below the average for March. The increase over the preceding week was confined to infants under one year of age, and resulted mainly from convulsions. Stated in exact terms, for comparisons, the death-rate last week was equivalent to an annual mortality of 32.36 to 1000 inhabitants (accepting as correct the census of last year), while Brooklyn lost but 24.58 persons in 1000 of its population. The average

death-rate in London and 12 other chief cities in Great Britain the last week of March this year, as has just been communicated to us by the Registrar General, was 32 to the 1000. The presence of cholera at our quarantine has not been accompanied by any well marked premonitions that are yet discerned in tracing out the causes of deaths the past month. The same fact appears in the records which Dr. FARR of England forwards to us week'ly from the Registrar-General's Office of Great Britain. There is every reason to believe that all the cholera which has reached our harbor has come to us by way of the German Ocean."

House to House Visitation.

At a recent meeting of the Metropolitan Board of Health, N. Y., Dr. STEPHEN SMITH laid before the Board a plan of house to house visitation, which no doubt will be adopted and will very materially aid in increased salubrity of the city, and the prevention of epidemic disease or its spread.

The plan consists in seeking out the cases of disease among the poor, using the dispensaries as centres and making them the basis of the system. There are seven of them in the city, all of them well known to the poorer classes. Reports are received daily of each one of the diseases that occur in the district, and the exact places where the painless diarrhoea, the forerunner of the cholera, manifests itself. When the symptom makes its appearance, the Inspectors visit every house in the district and administer the proper remedies where they find it necessary. The physician of each dispensary will be an appointee of the Board, and those who operate under him will so sub-divide the district as to render the plan perfectly feasible. Additional aid, will, however, be held as a reserve, in case the epidemic should become general; and the members of this reserve force will be dispatched to any point where their services may be needed. The small force will probably be the only one used, and the results in cities where this plan has been adopted show that the physicians have, in all cases, immediately conquered the disease when it has assumed an epidemic form. Thus, in Glasgow, during an epidemic, in which there occurred 15,000 cases of choleraic diarrhoea, the disease was so far arrested that only 50 deaths took place from cholera. A plan was also detailed for Houses of Refuge, to which families might be taken which could not be treated in their own homes, because of their sanitary condition. There have been cases where the removal of the family, the cleansing and renovating of their apartments, have been sufficient to arrest the progress of the disease; and after that had been done the family returned and remained healthy. A plan of cholera hospitals was also suggested.

Prison Mortality.

The Inspectors of the Massachusetts State Prison claim in their Annual Report, that while the mortality in the Eastern Penitentiary of Pennsylvania (a prison managed on the separate

system), is five and a half per cent., in the Massachusetts State Prison (managed on the congregate system), it is but three and two-fifths per cent., and taking into account the time served, the per centage in the latter is really less than one-half that in the former. If these statistics are founded on the observations of a single year, they are not, of course, worth much.

Mortality in Paris Hospitals.

STATISTICS show that there have been in the Paris hospitals, during the month of February, 597 accouchements, and 53 deaths. The relative mortality in the various hospitals is shown in the following table:

	Accouchements.	Deaths.
Beaujon,	33	0
Hôtel Dieu,	104	1
Saint Louis,	77	1
Charité,	42	1
Necker,	30	1
Pitié,	53	3
Cochin,	34	3
St. Antoine,	41	5
Cliniques,	56	8
Maternité,	74	30 (1)

The frightful mortality which has so long distinguished the Maternité, is arresting the attention of the authorities. M. LEFORT gives the following statistics, based on a consideration of 1,800,000 accouchements. Of 888,312 women confined in the Paris hospitals, 30,594, or 1 in 29, died. Of 934,781 women confined in their own houses, 4,405 died, or 1 in 212. The cause of the great mortality in hospitals is puerperal fever.

— TRICHINIASIS. In consequence of the announcement of several deaths from trichiniasis, the municipal councils of Lille, Marseilles, and other towns in France, have resolved that the veterinary surgeons appointed to inspect the butchers' meat offered for sale shall be supplied with microscopes for a more minute examination.

— EXTRACT OF MEAT. Another attempt is being made to bring to Europe the immense supply of good meat wasted in South America. Mr. LIEBERT, of Hamburg, has, it is said, attempted the manufacture of LIEBIG'S "extractum carnis," at Feray Bentos, in Uruguay, and sends home about 4,000 lbs. yearly. He is now increasing his establishments, has concluded a contract with the British Admiralty, and hopes soon to supply the extract at 16s. a pound. Each pound is the equivalent of 130 lbs. of meat, and will furnish broth for 128 men. The extract in its best state is absolutely free from fat or gelatine, and is now used very largely in continental hospitals.

— CREASOTE AND FERMENTS. A letter of M. BECHAMP to M. DUMAS mentions that creasote appears to be the agent which most strongly opposes the *development* of organic ferments, but adds that it does not interfere with the life of ferments or animalecules when they are once developed.

MARRIED.

ANDERSON-FREEMAN.—On Thursday, May 3, at the residence of the bride's parents, Woodbridge, N. J., by Rev. George O. Lucas, John Anderson and Martha E., daughter of Dr. Ellis B. Freeman.

CULLIS-KREED.—April 26, at Emanuel Church, Boston, by Rev. F. D. Huntington, D. D., Charles Cullis, M. D., and Lucetia A. Reed, of Boston.

COTTRELL-MYERS.—At Norwood, near Columbia, Pennsylvania, April 24th, by the Rev. John Chester, Dr. Joseph F. Cottrell, of Columbia, and Miss Hallie K., daughter of Colonel James Myers.

DOWLIN-WEST.—In this city, on the 28th ult., by the Rev. Albert Barnes, Dr. J. P. Dowlin, of Pennsylvania, and Mrs. Josephine L. West, of New York city.

FREEMAN-RANDOLPH.—At Woodbridge, N. J., on Tuesday, April 24, by Rev. George C. Lucas, Dr. Samuel E. Freeman and Kate F., daughter of the late Asher F. Randolph.

GEMMILL-BUCHER.—At Alexandria, Pennsylvania, by the Rev. S. M. Moore, April 18th, J. M. Gemmill, M. D., of Altoona, Pa., and Mrs. Ann Bucher, of the former place.

HAYS-ADAMS.—April 17th, at the residence of Dr. A. K. Marshall, in Mason county, Ky., by Rev. J. M. Worrell, Dr. William Hays, of Covington, Ky., and Miss Fannie M. Adams, of Washington.

MOORE-HAYMOND.—In Brookville, Ind., April 26th, 1866, by the Rev. John W. Keely, Major A. C. Moore, of Clarksburg, West Va., and Miss Ada, daughter of Dr. Haymond, of the former place.

PERKINS-ALBEE.—In Waterville, Me., April 26th, by Rev. John M. Caldwell, Wesley B. Perkins, M. D., of China, Me., and Miss M. Lizzie Albee, of Hallowell.

SAILOR-PILE.—In this city, May 1, at Pine street Church, by Rev. Dr. Egnerud, Randolph Sailor and Josephine Pile, daughter of Dr. Wilson H. Pile.

DIED.

BEDFORD.—In New York, May 1, Charles Constantine, son of Dr. Gunning S. Bedford.

HAMLEN.—In New York, May 6th, Dr. S. L. Hamlen, formerly of Cincinnati, in the 44th year of his age.

HONNESS.—Near Stephensburg, N. J., of typhoid fever, Mr. George W. Honness, student of medicine, in the 21st year of his age.

ANSWERS TO CORRESPONDENTS.

Dr. J. K. B., Fairmount, West Va.—Lallemand on Spermatorrhoea is out of print. A new edition is preparing, and will soon be out, when a copy will be sent.

Dr. E. M. D., Columbus, Ohio.—We cannot find Connolly on the Madness of Hamlet. It was, we think, republished in the *American Journal of Insanity*, Utica, N. Y., a copy of which may be had by addressing the publisher.

Dr. G. B. F., Cumberland, Md., and others.—We can procure for you the Ether spray producer for Dr. RICHARDSON's method of producing local anesthesia. Address also, CODMAN & SHURTLEFF, 13 & 15 Tremont street, Boston, Mass.

METEOROLOGY.

April,	23.	24.	25.	26.	27.	28.	29.
Wind.....	S. E. C'dy.	W. Clear	W. Clear.	N. W. Clear.	N. W. Clear.	W. Clear.	N. W. Clear.
Weather.....	Shw'r. T. & L.						High Wind.
Depth Rain.....	4-10						
Thermometer.							
Minimum.....	57°	42°	39°	34°	35°	40°	51°
At 5 A. M.....	57	47	55	55	50	57	57
At 12 M.....	53	57	56	50	55	65	69
At 5 P. M.....	63	57	56	46	50	70	65
Mean.....	60.	50.75	51.50	47.	45.75	58.25	59.75
Barometer.							
At 12 M.....	29.2	29.6	29.6	29.6	30.	29.9	29.8

Germanstown, Pa.

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